

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

**Status of Claims**

By this Amendment, Claims 1-6 are cancelled. New Claims 7-14 are added for consideration. Thus, Claims 7-14 are pending. Claims 7 and 11 are independent.

**Abstract**

The Official Action objects to the Abstract of the Disclosure because of the use of legal phraseology. The Abstract is amended to remove all legal phraseology. Applicants respectfully request withdrawal of this objection.

**Rejections Under 35 U.S.C. § 112**

Claims 1-6 are canceled by this Amendment. New Claims 7-14 are written in a manner to address and overcome all of the issues identified in the Official Action at paragraph "2". Accordingly, withdrawal of these rejections is respectfully requested.

**Rejections Under 35 U.S.C. § 102(b)**

The claimed invention is directed to a packaging filling apparatus where a packaging material having a laminated structure and a conductive layer adjacent to a sealing property thermoplastic is sealed longitudinally to be formed into a tubular shape. A transversal sealing apparatus seals the tube at spaced apart locations

forming transversal sealing bands. The transversal sealing apparatus includes a high-frequency oscillator, a controller connected to the oscillator, and an inductor connected to the oscillator. The inductor receives output from the oscillator to generate a magnetic field in the packaging material. A sealing quality control means transmits the control signal to the controller based on a statistical relation between a plurality of different effect factors affecting quality of the transversal sealing and the quality of transversal sealing. The controller controls the oscillator based on the control signal from the quality control means. The apparatus further includes a cutting apparatus which cuts the tubes in the transversal sealing bands.

The Official Action indicates Claims 1 and 5 are rejected under 35 U.S.C. § 102(b) as being anticipated by Papina et al ("Papina", U.S. Patent No. 5,787,681). In making this rejection, the Official Action identifies the sheet shaped pressure sensor 38 of Papina as a "control means".

The pressure sensor 38 detects a pressing force applied to the packaging material in an area corresponding to the sealing area. The detected pressing force is transmitted to the controller 36. Master data is stored as a master pattern, and is set to correspond to a pressing force for obtaining proper sealing conditions. The received data of the pressing force is compared with the master data. When the difference between the received data and the master data is considerably large, an alarm is sounded and the sealing process is stopped. Column 5, Lines 32-38. In an area having foreign matter between the counter bar 30 and inductor 19, the pressing force increases. Column 6, Lines 4-14. To the extent this increase in pressing force affects quality of the seal, it is the only factor affecting the quality of the seal detected by the sensor 38.

Independent Claim 7 recites, *inter alia*, a sealing quality control means transmitting a control signal to the controller based on a statistical relation between a plurality of different effect factors affecting quality of the transversal sealing. Non-limiting examples of the effect factors described in the specification include a moisture percentage contained in the web like packaging material, temperature of the fluid product filled therein, characteristics of the sealing thermoplastic layer of the web like packaging material, and thickness of the conductive layer. In Papina, the sensor 38 transmits a signal to the controller in response to only a single factor (the pressing force), and not a plurality of different factors as recited in the claim.

Similarly, independent Claim 11 recites, *inter alia*, sealing quality control means connected to the controller to transmit a control signal to the controller based on a statistical relation between a plurality of different effect factors affecting quality of the transversal sealing. As discussed above, Papina discloses transmitting the signal to the controller in response to only a single factor, the pressing force, and not a plurality of different factors as recited in Claim 11.

For the reasons cited above, Applicants respectfully submit that independent Claims 7 and 11 are in condition for allowance.

#### Rejections Under 35 U.S.C. § 103(a)

The Official Action indicates Claims 2-4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Papina. As noted above, these claims are canceled by this Amendment. The subject matter of these claims is substantially incorporated into new dependent Claims 8-10 and 12-14. These claims ultimately

depend from either independent Claim 7 or 11, which for the reasons cited above, are allowable. For at least this reason, these dependent claims are also allowable.

Conclusion

Should any questions arise on connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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